

*Comment Received From: Daikin U.S. Corporation*  
*Submitted On: 9/6/2024*  
*Docket Number: 24-BSTD-01*

**Daikin Comments - Title 24 August 15 Day Express Terms**

*Additional submitted attachment is included below.*



**DAIKIN U.S. CORPORATION**  
1700 PENNSYLVANIA AVE. STE 550,  
WASHINGTON, DC 20006  
PHONE: (202) 383-8740

September 6, 2024

Mr. David Hochschild, Chair  
Dr. Andrew McAllister, Commissioner  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Re: Docket 24-BSTD-01 15-Day Comment Period Response - VRF**  
(Submitted electronically to Docket 24-BSTD-01: Daikin 15 Day Comments on Revisions to 2025 Energy Code, Section 140.4(a)3)

---

Dear Chairman Hochschild and Commissioner McAllister,

Daikin U.S. Corporation (“Daikin”) respectfully submits this letter in response to the California Energy Commission (“CEC”) Justification for CEC-proposed Revisions to 2025 Energy Code, Section 140.4(a)3 on Multi-zone Space-conditioning System Types to Support the August 15-day Comment Period – Variable Refrigerant Flow (VRF) Systems for Schools published on August 22, 2024.

Daikin U.S. Corporation is a subsidiary of Daikin Industries, Ltd., the world’s largest air conditioning equipment manufacturer. The Daikin Group includes Daikin Applied, Daikin North America LLC, and Goodman Manufacturing Company, L.P. We understand the amount of effort CEC has put into these updates and we appreciate the opportunity to provide these comments.

As noted in our prior comments, Daikin supports CEC’s expansion of the use of heat pumps to further California’s need for decarbonization and providing effective energy use reduction. Daikin believes that heat pumps are the proven technology to achieve substantial GHG reduction and energy savings in both residential and nonresidential buildings and appreciates the inclusion of the heat pump baselines mandating use of heat pumps.

Daikin appreciates CEC’s modification to **Sections 140.4(a)3** which now includes a prescriptive allowance for use of a VRF system that incorporates a refrigerant-loop heat recovery and with a dedicated outdoor air system (DOAS) for space-conditioning in certain office buildings and schools. Although not completely inclusive as Daikin had proposed, the revised wording in this section will allow for installation of highly energy efficient VRF products in many offices and schools.

Daikin is supportive of the cost analysis conducted by CEC. We believe the Total Costs for VRF systems provided in the cost analysis are on the higher side of typical VRF systems with DOAS even for an A2L refrigerant based VRF systems.

We appreciate the Commission’s time and strongly support the cost analysis and the changes made to **Section 140.4(a)3** in this second 15-day language.

Sincerely,

David B. Calabrese  
Senior Vice President, Government Affairs

Deputy General Manager, Washington, D.C. Office  
Daikin U.S. Corporation  
E-Mail: [david.calabrese@daikin.com](mailto:david.calabrese@daikin.com)